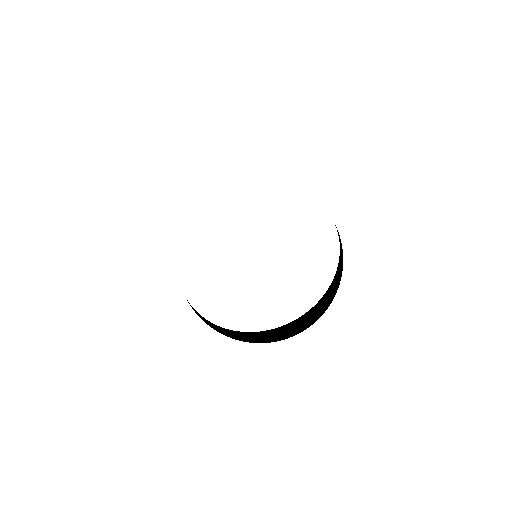
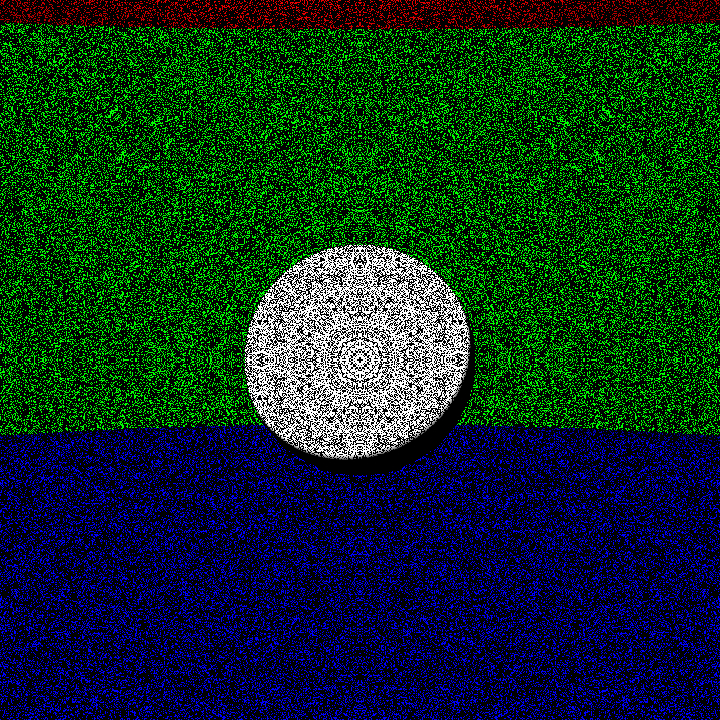
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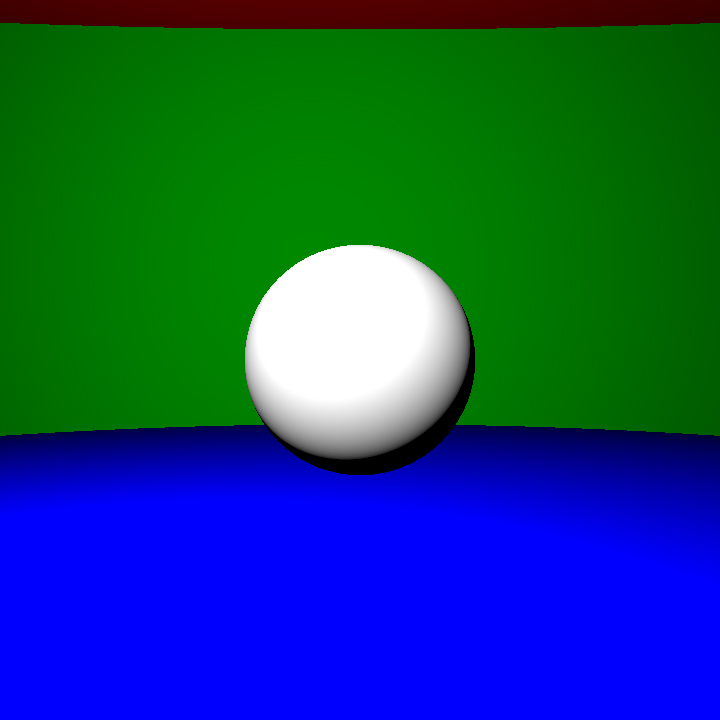
**TD 01**



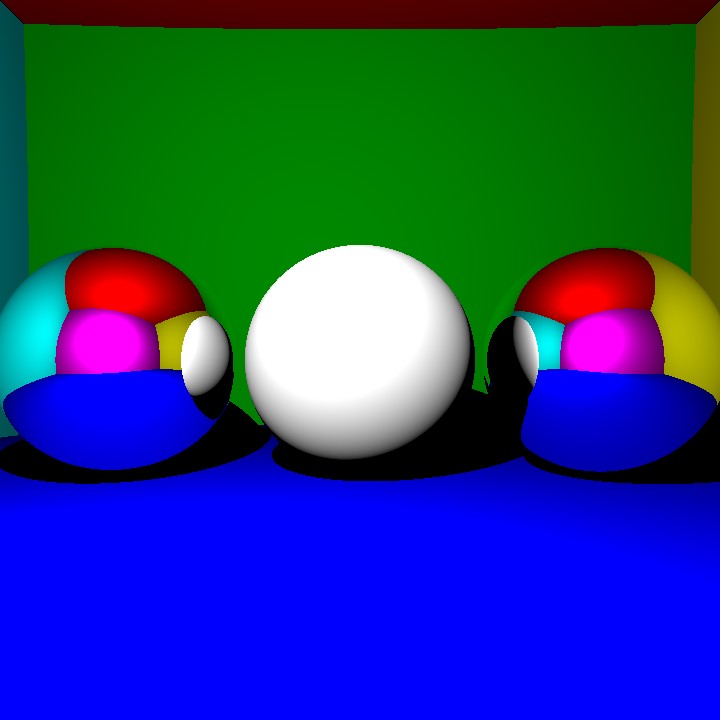
First sphere with intensity = 10^10



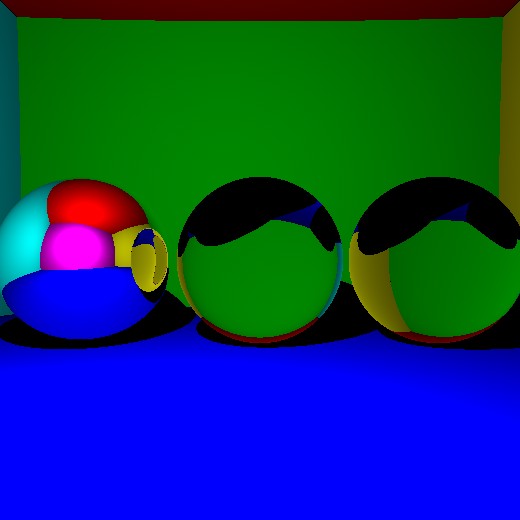
Noisy sphere



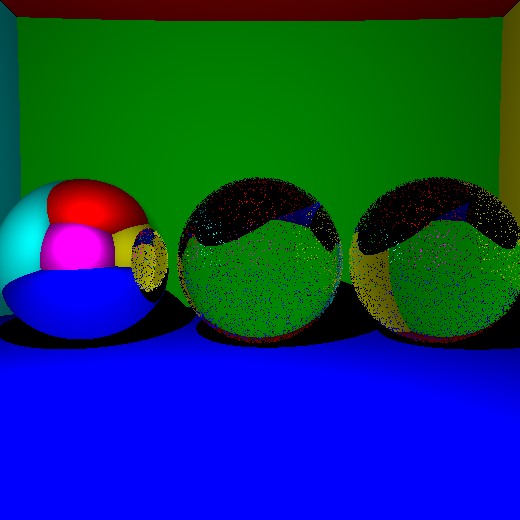
Denoise sphere with offset + gamma correction



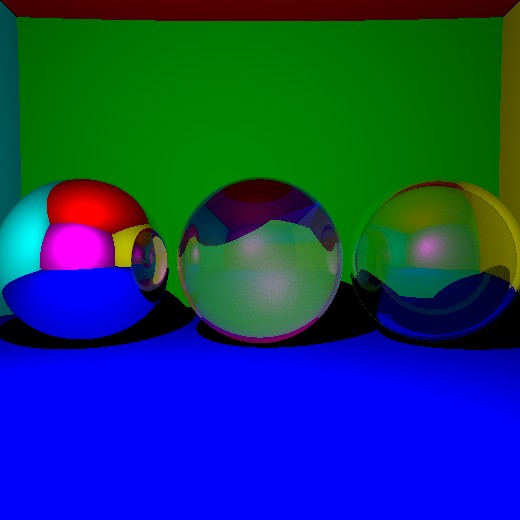
Spheres with shadows and mirrors



With refraction

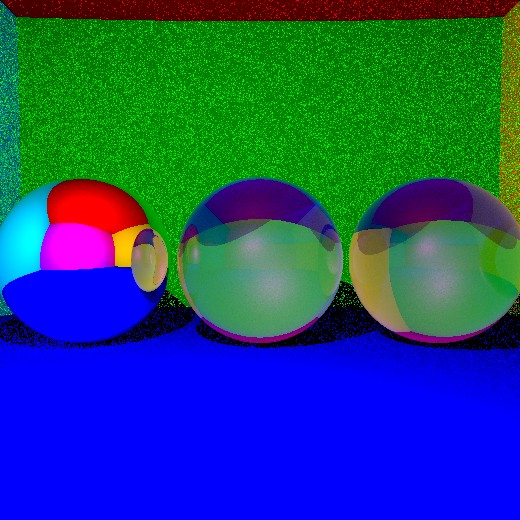


With Fresnel law

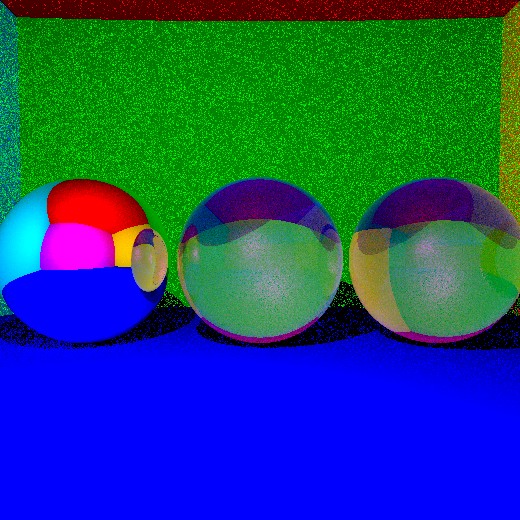


Clean Fresnel reflection with K = 1000 and taking about 54 seconds to run + try to do the hollow sphere (which doesn’t really work)

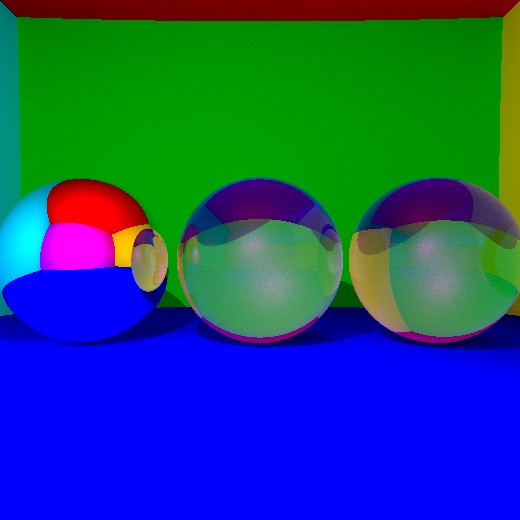
**TD 02**



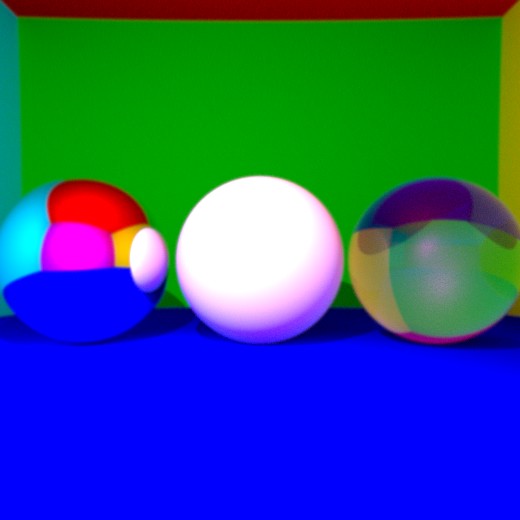
Indirect lighting (only on the transparent spheres, thus the noise on the walls)



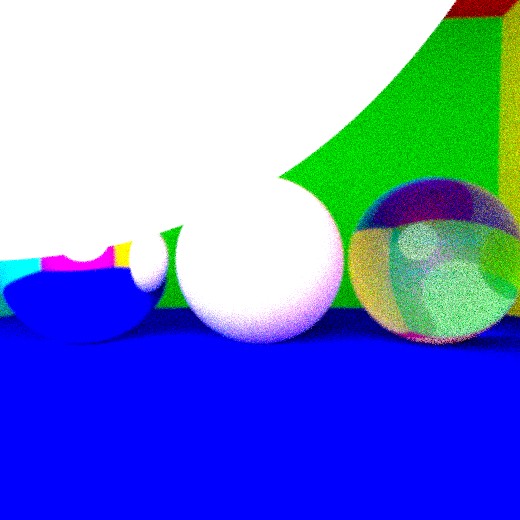
With parallelization (K = 100, 33 seconds)



K = 1000, 260 seconds



Antialiasing (K = 1000)



Soft shadow, K = 100 and radius of the light = 20

I think the soft shadow is working. However, it made the image noisier and took more time to run so I decided to use a point light source.

I then tried to reorganize all my files (see before clean commit) but I didn’t manage to get ride of a bug.

I still implemented the Ray-Triangle intersection though no way of checking if it works correctly.